

Listing and Amendments to the Claims

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This listing of claims will replace the claims that were published in the PCT Application:

1. (currently amended) Network antenna of the RLSA type in the form of a radial waveguide ~~(3)~~ and having a feed structure allowing simultaneous excitation of the antenna in two orthogonal linear polarizations, characterized in that wherein the feed structure, essentially placed to the rear of the antenna, consists of a circular waveguide ~~(6)~~ placed at the centre of the radial waveguide and coupled to the latter by two circular slots ~~(7, 8)~~ for the excitation of the antenna in a first linear polarization and of a coaxial waveguide ~~(10)~~ surrounding the circular waveguide ~~(6)~~ and coupled to the radial waveguide ~~(3)~~ by radial slots ~~(12)~~, the coaxial waveguide ~~(10)~~ being excited by a ring-shaped waveguide ~~(9)~~ placed coaxially on the outer periphery of the coaxial waveguide and coupled to the latter by slots ~~(14)~~ distributed around the inner periphery of the ring for the excitation of the antenna in a second linear polarization orthogonal to the first linear polarization.

2. (currently amended) Antenna according to Claim 1, in which the first linear polarization is excited by means of a first rectangular input waveguide ~~(4)~~ propagating the TE_{01} fundamental mode, oriented along an axial direction of the antenna, in the circular waveguide ~~(6)~~.

3. (currently amended) Antenna according to Claim 1, in which the second linear polarization is excited by means of a second rectangular input waveguide ~~(5)~~ propagating the TE_{01} fundamental mode, oriented in a direction perpendicular to the axial direction of the antenna, in the ring-shaped waveguide ~~(9)~~.

4. (currently amended) Antenna according to ~~Claims 2 and 3~~ Claim 2 in which the ~~two~~ first and second rectangular input waveguides ~~(4, 5)~~ are placed parallel to each other.

5. (currently amended) Antenna according to Claim 4, in which the ~~two~~ first and second rectangular input waveguides ~~(4, 5)~~ are placed one beneath the other.